



# Summer undergraduate field research positions in plant ecology

## Position Overview

**Position location:** [Cedar Creek Ecosystem Science Reserve](#)

**Faculty supervisor and lab group:** Forest Isbell, [Isbell Biodiversity Lab](#)

**Start and end dates:** June 7 - August 27, 2021

**Rate of pay:** \$7,200 = \$15 per hour x 40 hours per week x 12 weeks

**Research topic:** Terrestrial plant community and ecosystem ecology

**Required qualifications:** HS diploma, ability to work outdoors; interest in ecology or nature

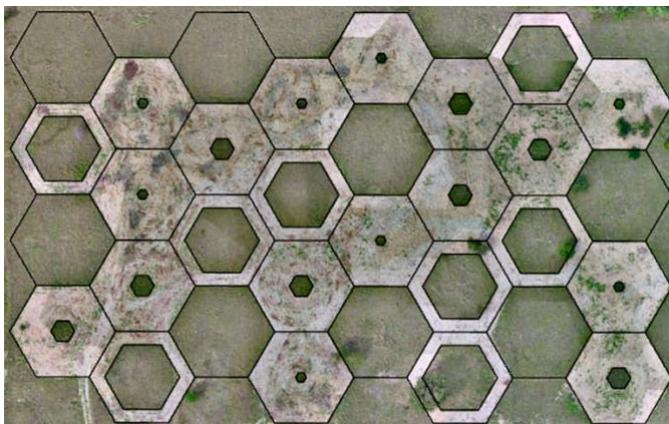
**Desired qualifications:** Experience working outdoors; considering graduate studies or a career in ecology or in a related discipline

**Application materials:** cover letter; resume; and contact information for three references

**To apply:** 1) Visit <https://humanresources.umn.edu/jobs>; 2) Click on the tab in the center of the page that corresponds to your situation; 3) Search Job ID #339428- Undergraduate Researcher

**Direct questions to:** Forest Isbell at [isbell@umn.edu](mailto:isbell@umn.edu)

Up to seven summer undergraduate research positions are available in the Isbell Biodiversity Lab at the University of Minnesota to work, primarily outdoors, at Cedar Creek Ecosystem Science Reserve. The undergraduate researchers will work as a team to conduct research in multiple ongoing projects considering terrestrial plant community and ecosystem ecology in grasslands and forests. The Isbell lab has several ecological research projects that consider effects of global changes (habitat fragmentation, biodiversity loss, drought, nutrient enrichment, and warming) on grassland plant communities and ecosystem functioning, effects of bison reintroduction on oak trees and savannas, and effects of wolf recolonization on other wildlife. The position responsibilities will include helping establish a new field experiment, sampling plants and soils in existing field experiments, sampling and maintaining a network of trail cameras, and recording data and metadata. Most of the work will be



outdoors. We have recently tabulated a new landscape-scale grassland experiment that manipulates dispersal by habitat fragmentation and seed addition treatments (see picture at left). We are sampling this, and other experiments with drones carrying hyperspectral and lidar sensors, allowing observations of biodiversity and ecosystem functioning at multiple scales. Although the undergraduate researchers in these positions will not be expected to collect remote sensing data, there will be an opportunity to learn more about this work.



**Cedar Creek Ecosystem Science Reserve**, the field research site for these positions, has many large-scale experimental platforms (some pictured below) and is one of the most active ecological research sites worldwide. This allows our researchers to build on an enormous amount of [available data](#) and establish robust networks of research collaborators. Cedar Creek is a member of NSF's [Long-Term Ecological Research \(LTER\) Network](#) and hosts the new [ASCEND](#) (Advancing Spectral Biology in Changing ENvironments to understand Diversity) NSF Biology Integration Institute. The Isbell lab contributes to both of these projects, making us part of larger collaborative teams.



The **University of Minnesota** is a global leader in ecological research. Only three other Universities in the world are ranked as highly for ecology by both the US News and World Report and the Shanghai Rankings. Furthermore, the University of Minnesota has more highly cited researchers in the Ecology/Environment category of the Web of Science than any other institution worldwide. This is truly an exceptional place to advance your career in ecological research.

The **Cedar Creek JEDI Council** is working to promote Justice, Equity, Diversity, and Inclusion at Cedar Creek. We seek to increase the representational diversity of our research teams and create a welcoming and inclusive climate. The Isbell lab is part of the team leading these efforts. Our vision is a future where biodiversity and the full diversity of people thrive. Our commitment is to be an inclusive place for research and community for people of all identities. We seek undergraduate researchers who will contribute to these efforts and embrace these commitments.

The **Cedar Creek Undergraduate Research Training Program** offers undergraduate researchers an opportunity to develop and receive mentoring on an independent research project. A team of graduate students and postdocs guide undergraduate students through the stages of planning and proposing projects, collecting and/or analyzing data, and delivering scientific presentations. A series of symposia, research training workshops, career panels, and seminars will be offered. This year, due to the pandemic, many of these events will be virtual and projects may need to analyze existing data.

